IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

COBBLESTONE WIRELESS, LLC, Plaintiff,

Case No. 2:22-cv-00477-JRG-RSP (Lead Case)

v.

T-MOBILE USA, INC.
Defendant,

JURY TRIAL DEMANDED
FILED UNDER SEAL

NOKIA OF AMERICA CORPORATION, ERICSSON INC.

Intervenors.

COBBLESTONE WIRELESS, LLC, Plaintiff,

Case No. 2:22-cv-00474-JRG-RSP (Member Case)

JURY TRIAL DEMANDED

v.

AT&T SERVICES INC.; AT&T MOBILITY LLC; AT&T CORP.

Defendant,

NOKIA OF AMERICA CORPORATION, ERICSSON INC.

Intervenors.

COBBLESTONE WIRELESS, LLC, Plaintiff,

Case No. 2:22-cv-00478-JRG-RSP (Member Case)

v.

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS.

Defendant,

NOKIA OF AMERICA CORPORATION, ERICSSON INC.

Intervenors.

JURY TRIAL DEMANDED

PLAINTIFF COBBLESTONE WIRELESS, LLC'S MOTION FOR SUMMARY JUDGMENT REGARDING VALIDITY OF '361 PATENT

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I. INTRODUCTION.

Defendants T-Mobile USA, Inc., AT&T Services Inc., AT&T Mobility LLC, AT&T Corporation, Cellco Partnership d/b/a Verizon Wireless and Intervenors Nokia of America Corporation, Ericsson Inc. raise affirmative defenses and declaratory judgment counterclaims alleging that asserted patent 10,368,361 ('361 Patent) is invalid. Their invalidity expert Dr. Daniel van der Weide offers two grounds of invalidity for the challenged claims the '361 patent, one based on the Gaal prior art reference alone and the other based on Gaal in combination with TS 36.211.

The Patent Trial and Appeal Board denied institution of Defendants' and Intervenors' IPR petition that was based upon substantively the same mapping of Gaal to the challenged claims as Dr. van der Weide offers. In denying institution, the three-member panel of the Board found that the petition failed to demonstrate a "reasonable likelihood" that Defendants and Intervenors would prevail under the preponderance of the evidence standard applied in IPRs. The Board's decision is well-reasoned and should be considered by this Court as persuasive authority. But whether the Court gives the Board's decision weight or not, the undisputed facts establish that the prior art and prior art combinations Dr. van der Weide presents opinions on fail to satisfy multiple limitations of each of the challenged claims.

For these reasons, Defendants and Intervenors fail to raise a material issue of fact supporting their affirmative defenses and counterclaims concerning invalidity of the '361 patent. Cobblestone should be granted summary judgment on these defenses and counterclaims.

In addition, Defendants and Intervenors fail to provide admissible evidence establishing that TS 36.211 was publicly available as of the August 1, 2014 priority date of the '361 patent. For this additional reason, Cobblestone should be granted at least partial summary judgment on the '361 patent invalidity defenses and counterclaims with respect to the combination of Gaal with TS 36.211.

II. STATEMENT OF ISSUE

Whether Cobblestone is entitled to summary judgment on the validity of the '361 patent?

III. STATEMENT OF UNDISPUTED MATERIAL FACTS

A. '361 Invalidity Grounds

- 1. On May 24, 2024, Defendants' and Intervenors' expert Dr. van der Weide submitted his expert report concerning those parties' affirmative defenses and declaratory judgment counterclaims of invalidity of the asserted patents. Ex. A ("van der Weide Report"). With respect to the '361 patent, this report presented opinions on two grounds for invalidity: (1) anticipation and/or obviousness due to Gaal and (2) obviousness due to Gaal in combination with TS 36.211. Ex. A at pp. 34–40. Both grounds apply to claims 10–13, 15, and 17 of the '361 Patent. *Id*.
- 2. Claim 10 and 17 of the '361 Patent are independent claims, and claims 11, 12, 13, and 15 depend from claim 10. Ex. B ("'361 Patent").
- 3. Claim 10 of the '361 Patent includes a limitation that the van der Weide Report calls [10.c]: determine, based on the quality status of the first frequency spectrum resource, that the first frequency spectrum resource is a sub-optimal resource, for the uplink channel and the downlink channel, relative to other frequency spectrum resources that are available for use by the wireless base station
- 4. Claim 17 of the '361 Patent includes a limitation that the van der Weide Report calls [17.b]: determine, based on the quality status, that the first frequency spectrum resource is a sub-optimal resource, for the uplink channel and the downlink channel, relative to other frequency spectrum resources that are available for use by the base station
- 5. The only difference in text between [10.c] and [17.b] is that the former includes the phrase "based on the quality status of the first frequency spectrum resource," while the later says "based on the quality status." However, in limitation [17.a], claim 17 refers to "a quality status of a first frequency spectrum resource," meaning that in both [10.c] and [17.b] the determining has to be based on the quality station of the first frequency spectrum resource specifically.

- 6. Claim 10 of the '361 Patent also includes a limitation that the van der Weide Report calls [10.d]:
 - in response to the determination that the first frequency spectrum resource is the sub-optimal resource, assign the first frequency spectrum resource to a shared resource pool
- 7. Claim 17 of the '361 Patent includes the same limitation, which the van der Weide Report calls [17.d].
- 8. The Gaal reference in question is U.S. Patent Application Publication No. US 2014/0341051 A1. Ex. A at ¶ 1103; Ex. C ("Gaal").
- 9. The TS 36.211 reference in question is technical standard document known as 3GPP TS 36.211 v12.2.0. Ex. A at ¶ 1113; Ex. D ("TS 36.211").

B. Gaal's Teachings of Flexible Subframes

10. Gaal is directed to LTE wireless communication systems. Ex. C at Abstract. In the systems it describes, radio communications are divided into a sequence of radio frames, each lasting a certain length of time such as 10 ms, and each further divided into subframes, as shown in Fig. 2 as annotated in the van der Weide Report:

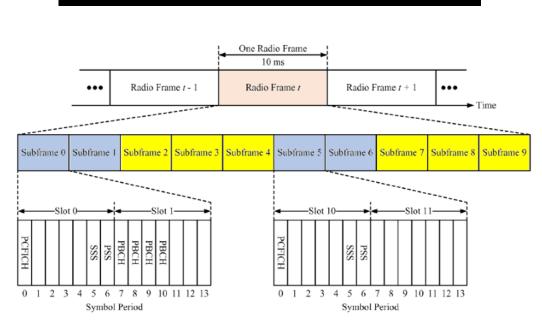


FIG. 2

Ex. A at ¶ 1134.

11. Wireless communications can include both uplink transmissions (transmissions from a user equipment ("UE") device to a base station) and downlink transmissions (transmissions from a base station to a user equipment device). Ex. A at ¶ 32. In the systems described in Gaal, certain subframes may be used for uplink transmissions and other subframes for downlink transmissions. Ex. A at ¶ 1149. Gaal includes a table from existing 3GPP wireless communications standards that shows examples of this:



Uplink-downlink	Downlink-to-Uplink Switch-point periodicity	Subframe number										
configuration		0	1	2	3	4	5	6	7	8	9	
0	5 ms	D	S	U	U	U	D	S	U	U	U	
1	5 ms	D	S	U	U	D	D	S	U	U	D	
2	5 ms	D	S	U	D	D	D	S	U	D	D	
3	10 ms	D	S	U	U	U	D	D	D	D	D	
4	10 ms	D	S	U	U	D	D	D	D	D	D	
5	10 ms	D	S	U	D	D	D	D	D	D	D	
6	5 ms	D	S	U	U	U	D	S	U	U	D	

Ex. A at ¶ 1149; Ex. C, Fig. 6.

- 12. Gaal explains that in its system subframes can be either "fixed" or "flexible" (also referred to as "dynamic"). Ex. A at ¶ 1150; Ex. C at [0075]. The seven subframe configurations in the existing 3GPP standard table shown in Figure 6 of Gaal are examples of "fixed" subframes. Ex. A at ¶ 1151; Ex. C at [0075]; Ex. E ("van der Weide Deposition") at 130:24–131:3.
- 13. Gaal's "flexible" subframes, on the other hand, can change between uplink and downlink channels dynamically, illustrated by the following annotated figure from the van der Weide Report, showing subframes 0–2 and 5–7 as fixed and subframes 3, 4, 8, and 9 as flexible:

Uplink-downlink configurations

Uplink-downlink	Downlink-to-Uplink Switch-point periodicity	Subframe number									
configuration		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U			D	S	U		

Flexible Subframes

Ex. A at ¶ 1153; Ex. C at [0077], Fig. 6.

14. Gaal does not specify how or why specific subframes are assigned to be fixed or flexible subframes. IPR2024-00138, Paper 1. Ex. F ("'361 IPR Petition") at 62 ("Gaal does not provide specific details of how subframes are selected as fixed or flexible. . . . Gaal does not specifically provide any criteria for designating a subframe as flexible."); Ex. E at 131:14–23.

C. TS 36.211 Does Not Teach Flexible Subframes

15. TS 36.211 describes fixed subframes, including for example the same table of subframe configurations as in Figure 6 of Gaal shown above:

Table 4.2-2: Uplink-downlink configurations

Uplink-downlink	Downlink-to-Uplink		Subframe number										
configuration	Switch-point periodicity	0	1	2	3	4	5	6	7	8	9		
0	5 ms	D	S	U	U	U	D	S	U	U	U		
1	5 ms	D	S	U	U	D	D	S	U	U	D		
2	5 ms	D	S	U	D	D	D	S	U	D	D		
3	10 ms	D	S	U	U	U	D	D	D	D	D		
4	10 ms	D	S	U	U	D	D	D	D	D	D		
5	10 ms	D	S	U	D	D	D	D	D	D	D		
6	5 ms	D	S	U	U	U	D	S	U	U	D		

Ex. A at ¶ 1283; Ex. D at 12.

- 16. TS 36.211 does not describe "flexible" or "dynamic" subframes. In fact, it does not contain the word "flexible," and contains the word "dynamic" only once, in the context of "the dynamic cyclic shift offset." Ex. D at 120.
- 17. The only portion of the van der Weide Report that could be read as asserting that TS 36.211 teaches or discusses flexible or dynamic subframes is its paragraphs 1299 and 1300. Ex. A at ¶¶ 1299–1300. The only evidence cited in these paragraphs is the following from page 11 of TS 36.211:

In case multiple cells with different uplink-downlink configurations in the current radio frame are aggregated and the UE is not capable of simultaneous reception and transmission in the aggregated cells, the following constraints apply:

- if the subframe in the primary cell is a downlink subframe, the UE shall not transmit any signal or channel on a secondary cell in the same subframe
- if the subframe in the primary cell is an uplink subframe, the UE is not expected to receive any downlink transmissions on a secondary cell in the same subframe
- if the subframe in the primary cell is a special subframe and the same subframe in a secondary cell is a downlink subframe, the UE is not expected to receive PDSCH/EPDCCH/PMCH/PRS transmissions in the secondary cell in the same subframe, and the UE is not expected to receive any other signals on the secondary cell in OFDM symbols that overlaps with the guard period or UpPTS in the primary cell.

Ex. A at ¶ 1300; Ex. D at 11.

18. This text appears in Section 4 of TS 36.211. The introductory portion of Section 4 provides context for this discussion:

Transmissions in multiple cells can be aggregated where up to four secondary cells can be used in addition to the primary cell. Unless otherwise noted, the description in this specification applies to each of the up to five serving cells. In case of multi-cell aggregation, different frame structures can be used in the different serving cells.

Ex. D at 10.

- 19. The text from page 11 of TS 36.211 cited by the van der Weide Report refers to "multiple cells with different uplink-downlink configurations," but the Report cites to no evidence that these cells with different configurations are "flexible" or change configurations "dynamically." The "uplink-downlink configurations" described in TS 36.211 are the configurations of its Table 4.2-2, the same fixed configurations as in Gaal Figure 6. Ex. D at 11 ("The supported uplink-downlink configurations are listed in Table 4.2-2"), 12 (containing Table 4.2-2); Ex. A at ¶¶ 1149–1151; Ex. C at [0075].
- 20. The "constraints" listed in TS 36.211 and cited by the van der Weide Report apply when "the UE is not capable of simultaneous reception and transmission in the aggregated cells." Ex. D at 11. Uplink communications involve transmission by the UE, and downlink communications involve reception by the UE. Ex. A at ¶ 32. Therefore, the three constraints quoted by the van der Weide Report flow as a result of a particular UE not being capable of simultaneous reception and

transmission. For example, if the subframe in the primary cell is a downlink subframe, then the UE has to be able to receive during that subframe. Due to the fact that the UE is not capable of simultaneous reception and transmission, it cannot transmit on a secondary cell in the same subframe, as stated in the first constraint. Ex. D at 11. Likewise, if the subframe in the primary cell is an uplink subframe, then the UE has to be able to transmit during that subframe. Due to the fact that the UE is not capable of simultaneous reception and transmission, it cannot receive on a secondary cell in the same subframe, as stated in the second constraint.

D. Denial of Institution of IPR Presenting Same Theory of Obviousness over Gaal

- 21. On November 30, 2023, the Defendants and Intervenors submitted a petition for *Inter Partes* Review of the '361 patent, IPR2024-00138, Paper 1. Ex. F. Ground 1 of this Petition challenged the same six claims of the '361 patent as obvious over the same Gaal reference as Dr. van der Weide's report. Ex. F at 2.
- 22. In support of the '361 IPR Petition, the Defendants and Intervenors submitted an expert declaration from James A. Proctor, IPR2024-00138, Ex. 1003. Ex. G ("Proctor Declaration").
- 23. The van der Weide Report cites evidence and makes arguments concerning the Gaal reference and the '361 patent claims that are very similar to those made in the Proctor Declaration. For example, the discussion of Gaal and claim 10 of the '361 patent in the Proctor Declaration contains 12 figures or portions of figures from Gaal with added color annotations. Ex. G at ¶¶ 135–200. The corresponding portion of the van der Weide Report only contains 11 such figures. Ex. A at ¶¶ 1126–1203. This difference is the result of an inadvertent failure to cut and paste one of the figures from the Proctor Declaration into the van der Weide Report. *Compare* Ex. A at ¶ 1166 ("Reproduced below is an illustration . . .") with Ex. G at ¶ 166 (containing the described illustration). If the van der Weide Report had actually cut and pasted the figure that it describes,

then it would contain the same 12 annotated figures, in the same order, for the same claim elements as the Proctor Report.

- On June 3, 2024, the Patent Trial and Appeal Board issued its Decision Denying Institution of *Inter Partes* Review, IPR2024-00138, Paper 14. Ex. H ("Institution Decision"). In this decision, the Board denied institution on the merits. Ex. H at 25. In particular, the Board determined "that the Petition does not demonstrate a reasonable likelihood that Petitioner would prevail in establishing that claim 10 would have been obvious over Gaal." Ex. H at 21. The Board likewise determined that the Petition did not demonstrate a reasonable likelihood that the Petitioners would prevail in establishing that claims 11–13, 15, and 17 would have been obvious over Gaal. *Id*.
- 25. In finding that Petitioners had failed to demonstrate a reasonable likelihood they would prevail as to claim 10, the Board wrote:

Petitioner asserts that flexible subframes are sub-optimal because they can be more prone to interference than fixed subframes. Pet. 34 (citing Ex. 1004 ¶ 76; Proctor Decl. ¶ 165). But this simply is the result of the fact that a subframe in one base station cell can be handling uplink while a corresponding subframe in an adjacent base station cell is handling downlink. Proctor Decl. ¶¶ 166–168. There is nothing in Gaal to indicate that a subframe is designated as flexible, or created to be flexible, as the result of any measurement of quality status. Indeed, as the Petition admits, "Gaal does not specifically provide any criteria for designating a subframe as flexible." Pet. 62. As discussed above in Section III.D.1, for Release 12 of the LTE standard, an eIMTA feature provides for an embellishment of the seven predefined TDD configurations, in which each configuration assigns certain subframes as fixed and others as flexible.

Nor is there any concept in Gaal of a "shared resource pool" to which a flexible subframe is assigned in response to being determined as sub-optimal. Petitioner characterizes the flexible subframes as being assigned to a shared resource pool because they can be allocated to either uplink or downlink. Pet. 38. But this is an inherent property of a flexible subframe — Petitioner does not establish that the flexible subframe is assigned to a shared resource pool or anything else in response to a determination that it is sub-optimal.

In addition, as Patent Owner argues, nothing in Gaal teaches determining, based on quality status, that a flexible subframe is sub-optimal for both uplink and downlink. The only quality status measurements disclosed in Gaal are CSI

measurements, which relate to downlink but which are useless for uplink. Ex. 1001, 9:8-12; Ex. 1004 ¶ 85.

Ex. H at 20–21 (emphasis added).

- 26. As in the '361 IPR Petition, both grounds of '361 invalidity in the van der Weide Report are based upon measurements of the CSI. As the van der Weide Report explains, one technique for measuring channel quality "involves using channel state information (CSI) reference signals (CSI-RS). The UE measures CSI of the CSI-RS and then transmits measurements and feedback back to the base station in a CSI report." Ex. A at ¶ 1060. "[A] configured CSI report can include measurements such as channel quality indicator (CQI)." *Id.* at ¶ 1061.
- 27. For both grounds (Gaal alone and Gaal combined with TS 36.211), the van der Weide Report point to processing CSI feedback containing the CQI as the "determin[ing] a respective quality status" in limitation [10.a]. Ex. A at ¶¶ 1141–1144 ("a POSITA would have known, or at least found obvious, that the processor inside of the base station would execute an algorithm to measure and process the CSI feedback through a 'channel quality indicator (CQI)'"), ¶¶ 1288–1289 ("A POSITA would have known that the CSI-RS are the measured reference signals used to generate the quality status measurements described in Gaal").
- As in the '361 IPR Petition, the van der Weide Report and Dr. van der Weide's testimony indicate that flexible subframes are suboptimal by their "nature," not as a result of CSI measurement or CQI values. Ex. A at ¶ 1165 ("Gaal discloses or at least renders obvious 'flexible' subframes that are 'sub-optimal' relative to 'fixed' subframes because the flexible subframes could be subject to interference due to their flexible nature."), ¶ 1299 ("Gaal in view of TS 36.211 renders obvious the fact that the flexible or dynamic subframes disclosed in TS 36.211 are determined to be sub-optimal as compared to other downlink and/or uplink frequency spectrum resources.").

- 29. Dr. van der Weide's testimony further demonstrates that, under his theory of obviousness, the flexible subframes are sub-optimal simply because they are flexible, independent of whether any CQI determination has been made:
 - Q.... In your opinion, is it necessary to measure the CQI of the flexible subframe and of the fixed subframe in order for the flexible subframe to be suboptimal?
 - A. No. And I substantiate that in my paragraph 1165.
 - Q. So in paragraph [1165] you say that the flexible subframes are suboptimal relative to fixed subframes because they are, quote, "subject to interference"; is that right?
 - A. Correct.
 - Q. And in your opinion, the flexible subframes are suboptimal relative to the fixed subframes whether or not a CQI measurement has been performed of the flexible subframe and the fixed subframe and a comparison between those CQI measurements performed; is that right?
 - A. Well, there's an inherent distinction between the two, so there is a comparison.
 - Q. And the inherent distinction you refer to is that one of them is flexible so that neighboring cells could have different uplink and downlink assignments for that subframe and the other's fixed so the neighboring cells would have the same direction of traffic?
 - A. And thus flexible are more subject to interference, as Gaal teaches.

Ex. E at 145:5–146:3 (emphasis added).

30. Likewise, as in the '361 IPR Petition, the van der Weide Report and Dr. van der Weide's testimony indicate that the flexible subframes are in the purported "shared resource pool" simply because they are flexible, not because of some determination that they are sub-optimal. Ex. A at ¶ 1175 ("the flexible resources constitute the first frequency spectrum resource that is assigned to the shared resource pool"), ¶ 1311.

31. Dr. van der Weide's testimony further demonstrates that, under his theory of obviousness, the shared resource pool simply is the set of flexible resources:

So the '361 Patent contemplates a pool which is a flexible -- a set of flexible resources that can be assigned to -- for an uplink or downlink channel based on suitability. Those, in my opinion, are the flexible subframes of Gaal.

Ex. E at 151:6–10.

32. As noted above, Gaal does not specify how or why specific subframes are assigned to be fixed or flexible subframes. Ex. F at 62 ("Gaal does not provide specific details of how subframes are selected as fixed or flexible. . . . Gaal does not specifically provide any criteria for designating a subframe as flexible."); Ex. E at 131:14–23.

IV. GOVERNING LAW

Summary judgment is warranted when the pleadings, depositions, answers to interrogatories, and admissions on file, altogether with the affidavits show "there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a); Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986). "By its very terms, this standard provides that the mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine issue of material fact." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 247-48 (1986). Rather, in order to avoid summary judgment, Defendants and Intervenors must present enough evidence for the factfinder to reasonably find in their favor. Anderson, 477 U.S. at 252.

As parties raising invalidity of the '361 Patent as an affirmative defense and as a cause for declaratory judgment, the burden is on Defendants and intervenors to establish invalidity. *Jazz Photo Corp. v. International Trade Com'n*, 264 F.3d 1094, 1102 (Fed. Cir. 2001) ("The burden of establishing an affirmative defense is on the party raising the defense.") Invalidity must be established by clear and convincing evidence. *Microsoft Corp. v. 141 Ltd. Partnership*, 564 U.S.

91, 95 (2011).

V. <u>ARGUMENT</u>

A. The Board's Decision Denying Institution Is Persuasive Authority and Summary Judgment Should Be Granted by the Same Reasoning.

While not binding on this Court, the PTAB's decision denying institution may be considered as persuasive authority. *See Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1163 (Fed. Cir. 2006) ("While appellant does not argue that the Board decision has a binding effect on this court, Board decisions nevertheless represent the views of a panel of specialists in the area of patent law.")

Notably, the standard for institution before the PTAB is substantially lower than the standard for establishing invalidity before this Court. Here, an invalidity defense must be proved by clear and convincing evidence. *Microsoft Corp. v. 141 Ltd. Partnership*, 564 U.S. 91, 95 (2011). Before the PTAB, the ultimate evidentiary burden for the petitioner to prevail is a preponderance of the evidence. 35 U.S.C. § 316(e). Moreover, at the institution decision stage, the petitioner need only show that there is a "reasonable likelihood" that it would ultimately prevail as to at least one claim. 35 U.S.C. § 314(a). In denying institution, the Board found that the '361 IPR Petition failed to reach even that modest bar. Ex. H at 21.

As explained in Section III.D above, Dr. van der Weide depends on the same theory of flexible subframes as was presented by Defendants and Intervenors in the '361 IPR Petition and rejected by the Board. Dr. van der Weide's theory should be rejected and summary judgment granted for the same reasons as the Board denied institution.

B. The prior art does not "determine, based on the quality status [of the first frequency spectrum resource], that the first frequency spectrum resource is a sub-optimal resource" (limitations [10.c] and [17.b])

Each of the challenged claims of the '361 patent requires determining that the first

frequency spectrum resource is sub-optimal "based on" a quality status. In each claim and for each ground, the quality status recited in prior limitations [10.a] and [17.a] is mapped to processing CSI feedback containing the CQI. Ex. A at ¶¶ 1141–1144 ("a POSITA would have known, or at least found obvious, that the processor inside of the base station would execute an algorithm to measure and process the CSI feedback through a 'channel quality indicator (CQI)'"), ¶¶ 1231–1232, ¶¶ 1288–1289 ("A POSITA would have known that the CSI-RS are the measured reference signals used to generate the quality status measurements described in Gaal"), ¶ 1344.

For claim 17 only, the van der Weide Report also mentions measurement of Received Interference Power (RIP). Ex. A at ¶¶ 1233, 1349. The Report does not contend that either Gaal or TS 36.211 mention or teach RIP. *Id.* Nor does it provide any argument for how or why Gaal or TS 36.211 would be modified to make use of RIP in place of or in addition to measurements of CSI.

As Dr. van der Weide maps the prior art to the challenged claims, the sub-optimal resources are the "flexible subframes." According to Dr. van der Weide, the flexible subframes are suboptimal by their "nature," not as a result of CSI measurement or CQI values. Ex. A at ¶ 1165 ("Gaal discloses or at least renders obvious 'flexible' subframes that are 'sub-optimal' relative to 'fixed' subframes because the flexible subframes could be subject to interference due to their flexible nature."), ¶ 1299 ("Gaal in view of TS 36.211 renders obvious the fact that the flexible or dynamic subframes disclosed in TS 36.211 are determined to be sub-optimal as compared to other downlink and/or uplink frequency spectrum resources.").

Accordingly, to the extent any "determin[ation]" is made that a subframe is sub-optimal, that determination would be a determination that the subframe is a flexible subframe. Dr. van der Weide does not contend that CSI measurement or any other quality measurement would be used in Gaal (alone or in combination with TS 36.211) to determine that a subframe is flexible. Indeed,

as Defendants and Intervenors told the Board in their IPR petition, Gaal does not specify how or why specific subframes are assigned to be fixed or flexible subframes. Ex. F at 62 ("Gaal does not provide specific details of how subframes are selected as fixed or flexible. . . . Gaal does not specifically provide any criteria for designating a subframe as flexible."); Ex. E at 131:14–23.

Therefore, Defendants and Intervenors fail to show that a determination that a subframe is suboptimal, i.e., that it is a flexible subframe, is "based" on a quality status determined from CSI measurements (or any alternative measurement such as RIP). For at least this reason, they fail to show that limitations [10.c] and [17.b] are disclosed or rendered obvious by Gall or by Gall in combination with TS 36.211.

C. The prior art does not "determine . . . that the first frequency spectrum resource is a sub-optimal resource, for the uplink channel and the downlink channel" (limitations [10.c] and [17.b])

Each of the challenged claims of the '361 patent requires determining that the first frequency spectrum resource is sub-optimal "for the uplink channel and the downlink channel." In each claim and for each ground, the quality status recited in prior limitations [10.a] and [17.a] is mapped to processing CSI feedback containing the CQI. Ex. A at ¶¶ 1141–1144, ¶¶ 1231–1232, ¶¶ 1288–1289, ¶ 1344.

Gaal states that its interference measurements making use of CSI measurement "would be useless" if performed on an uplink subframe. Ex. C at [0085]. Accordingly, even if Defendants and Intervenors had shown that subframes were determined to be flexible "based on" CSI measurement, they would have shown determination that a subframe was determined to be "a suboptimal resource, *for the uplink channel* and the downlink channel." For at least this additional reason, they fail to show that limitations [10.c] and [17.b] are disclosed or rendered obvious by Gaal or by Gaal in combination with TS 36.211.

D. The prior art does not "in response to the determination that the first frequency spectrum resource is the sub-optimal resource, assign the first frequency spectrum resource to a shared resource pool" (limitations [10.d] and [17.d])

Each of the challenged claims of the '361 patent requires assigning the first frequency spectrum resource to a shared resource pool "in response to the determination" that the resource is sub-optimal. According to Dr. van der Weide, the flexible subframes are in the purported "shared resource pool" simply because they are flexible, not because of some determination that they are sub-optimal. Ex. A at ¶ 1175 ("the flexible resources constitute the first frequency spectrum resource that is assigned to the shared resource pool"), ¶ 1311.

Dr. van der Weide's testimony further demonstrates that, under his theory of obviousness, the shared resource pool simply is the set of flexible resources:

So the '361 Patent contemplates a pool which is a flexible -- a set of flexible resources that can be assigned to -- for an uplink or downlink channel based on suitability. Those, in my opinion, are the flexible subframes of Gaal.

Ex. E at 151:6–10.

Gaal does not specify how or why specific subframes are assigned to be fixed or flexible subframes. Ex. F at 62 ("Gaal does not provide specific details of how subframes are selected as fixed or flexible. . . . Gaal does not specifically provide any criteria for designating a subframe as flexible."); Ex. E at 131:14–23.

Since under Defendants' and Intervenors' mapping of the prior art to the claims, all of the flexible resources are in the shared resource pool, there is no assignment of resources to the shared resource pool "in response" to a determination they are sub-optimal. For at least this reason, they fail to show that limitations [10.d] and [17.d] are disclosed or rendered obvious by Gaal or by Gaal in combination with TS 36.211.

E. Summary Judgment Should Additionally Be Granted as to the Combination of Gaal with TS 36.211 if Plaintiff's Motion to Strike the Declaration of Craig Bishop Is Granted

If the Court grants Cobblestone's motion to strike the declaration of Craig Bishop, filed concurrently, Cobblestone is entitled to summary judgment of no invalidity regarding Dr. van der Weide's opinions that Gaal in combination with TS 36.211 (Ex. A at ¶¶ 1263-1372) are invalidating because Defendants and Intervenors cannot show that TS 36.211 is prior art.

Dr. van der Weide relies exclusively on the purportedly expert opinion of Mr. Bishop to establish the date on which the 3GPP documents were allegedly publicly available. Ex. A at 1115 ("As supported by the Declaration of Craig Bishop, TS 36.211 was publicly available by June 16, 2014."). Dr. van der Weide's reliance on Mr. Bishop's purported opinion is important because, for example, Defendants and Dr. van der Weide use Mr. Bishop's purported expert testimony to achieve a purported prior date of June 16, 2014 for reference TS 36.211, a date that is approximately six weeks before the August 1, 2014 priority date for the '361 patent. *See* Ex. A at ¶¶ 1074, 1115.

Dr. van der Weide does not offer his own independent opinions establishing that the 3GPP documents were publicly available prior to the priority date of the relevant patents. Indeed, Dr. van der Weide expresses little expertise related to 3GPP documentation at all, only disclosing familiarity with 3GPP from a single international arbitration. *Id.* at ¶ 12. Accordingly, if Mr. Bishop's expert opinions regarding public availability of the 3GPP documents are struck, Dr. van der Weide has no additional opinion demonstrating that the 3GPP documents are prior art. Defendants and Intervenors have no other evidence demonstrating that the 3GPP documents are prior art, and Cobblestone is entitled to summary judgment of no invalidity for Defendants and Intervenors grounds that are based on the 3GPP documents at issue.

Accordingly, for this additional reason, Cobblestone requests summary adjudication

denying Defendants' and Intervenors' arguments regarding Gaal in combination with TS 36.211 (Ex. A at ¶¶ 1263-1372).

VI. <u>CONCLUSION</u>

For the foregoing reasons, Defendants' and Intervenors' mapping of the prior art to the claims fails to satisfy the challenged claims of the '361 Patent, and Cobblestone should be granted summary judgment on the '361 patent invalidity defenses and counterclaims.

Dated: July 3, 2024 Respectfully submitted,

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Attorneys for Plaintiff, Cobblestone Wireless, LLC **CERTIFICATE OF AUTHORIZATION TO FILE UNDER SEAL**

Plaintiff hereby files its Certificate of Authorization to File its Motion to Strike Under Seal

per Local Rule CV-5(a)(7)(A)-(B). The undersigned counsel for Plaintiff hereby certifies that the

Court has already granted authorization to seal the document as set forth in Paragraph 19 of the

Protective Order entered in this action at Dkt. 77.

/s/ Reza Mirzaie

Reza Mirzaie

CERTIFICATE OF SERVICE

Pursuant to the Federal Rules of Civil Procedure and Local Rule CV-5, I hereby certify

that, on July 3, 2024, counsel of record who have appeared in this case are being served with a

copy of the foregoing via email.

/s/ Reza Mirzaie

Reza Mirzaie